Meets the requirements of HTM 2022 - Medical Gas Pipeline Systems

- Duplex, Triplex and Quadruplex configurations to suit system requirements
- Proven design based on established technology
- Flexible design allows compact installations in existing and new plant rooms
- Oil injected rotary vane vacuum pumps for quiet and vibration free operation
- Electronic controls and monitoring ensure reliable plant operation
- Plant controls are configured to minimise running costs
- Controls include connections for medical gas alarm system and BMS
- Plant includes all interconnecting pipework and wiring
- Plant is fully tested and certified prior to dispatch
- Modular format allows upgrade from Duplex to Triplex and Quadruplex to meet future hospital demand
- Alternative plant layouts available on request
- Upgradeable to HTM 02-01 for future compliance
BA Series Rotary Vane Vacuum Pumps

P3 BA Series Medical Vacuum Plant uses oil lubricated rotary vane vacuum pumps as standard, providing:
- The most modern, cost effective method of generating vacuum
- Smooth, vibration free running
- Vibration damping mountings
- Compact design with internal oil recirculation eliminating excess pipework and potential oil leaks
- Air cooled
- Easy access for maintenance
- Reliability and long service life
- Excellent water vapour tolerance
- Includes oil mist eliminator
- Low starting and running torque

Vacuum reservoirs are supplied to prevent duty pump continuously starting and stopping for intermittent vacuum demand.

For flow rates above 500l/min, 2 reservoirs are specified.

Duplex Bacterial Filter

- Efficiency of 99.995%
- Pressure differential gauges to indicate filter element performance
- Arranged in parallel to allow isolation for maintenance without interruption to vacuum supply
- Pressure drop across filters within limits specified in HTM 2022
- Supplied complete with condensation drainage flasks and isolation valves
- Mounted in free standing frame for flexibility of layout

Electronic Vacuum Plant Control

- Monitors and automatically ensures continuity of supply via multiple fail-safe systems
- Transducer control and digital display of vacuum level
- Displays plant status and alarm conditions
- User-adjustable control functions via fascia pushbutton and internal DIP switches
- Manual override of duty pump selection
- Emergency signal outputs to remote medical gas alarm system and BMS
- Compact design, mounted adjacent to pump starter panels for user convenience
- Automatically restarts plant following power supply interruption
HTM 2022 Medical Vacuum Plant Selection Guide

At least two pumps should be provided. The actual number is at the discretion of the plant manufacturer to ensure optimum cost benefit of the system. In all cases, the total capacity must be at 75% of the system design flow with one pump not running. All pumps should be designed for continuous operation.

Once a flow rate requirement for the plant has been calculated, consideration can be given to the number of pumps to be specified.

Duplex
- Suitable for low system design flows or where plant room size does not allow larger layouts
- Provides future potential for upgrade in capacity

Triplex
- Suitable for higher design flows
- Flexible - additional pumps can be 'called for' to meet medical vacuum demand
- Efficient - smaller pumps than duplex plant (for a given flow rate) will warm up more quickly, and run more efficiently
- Pump output can more closely match medical vacuum demand than duplex plant
- Provides future potential for upgrade in capacity

Nominal operating pressure - 475mmHg
### Technical Data

#### Duplex Plant

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Flow Rate (l/min)</th>
<th>Motor Power (kw)</th>
<th>Noise Level (dB)</th>
<th>No. of Power Supplies</th>
<th>400V Distribution Fuse (A)</th>
<th>No. of Vacuum Reservoirs</th>
<th>Total Reservoir Capacity (l)</th>
<th>Typical Dimensions L x W x H (mm)</th>
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